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Supervision

Educational Technology and Distance Supervision in Counselor Education

Robert Milton Carlisle, Danica G. Hays, Shana L. Pribesh,
and Chris T. Wood

The authors used a nonexperimental descriptive design to examine the prevalence of distance supervision in counselor education programs, educational technology used in supervision, training on technology in supervision, and participants' ($N = 673$) perceptions of legal and ethical compliance. Program policies are recommended to guide the training and use of technology in supervision.

Keywords: distance supervision, educational technology, ethical and legal issues, counselor education, distance education

With the increased availability and use of technology in recent decades, the field of educational technology has emerged to examine how technology facilitates teaching, learning (Hsu, Hung, & Ching, 2013), and ethical practices for using technology in education (EdTechReview, 2013). Although the number of research articles published in peer-reviewed journals on educational technology has grown exponentially in recent years (Hsu et al., 2013), within the field of counselor education, published studies are sparse. However, as with other fields of education, counselor education programs have increasingly adopted web-based/online asynchronous and synchronous delivery methods in both classroom education and supervision (Coker & Schooley, 2009; Rousmaniere & Renfo-Michel, 2016). For example, the number of online programs accredited by the Council for Accreditation of Counseling and Related Educational Programs (CACREP) increased from seven to 24 within a 5-year period (CACREP, n.d.; Coker & Schooley, 2009). Considering the increased number of counselor education programs offering online programs, the use of educational technology in supervision has likely increased as well. Wantz et al. (2003) noted that 38% ($n = 35$) of 92 supervisors from 50 institutions reported using technology in some manner; however, no studies have since been conducted to examine the scope of technology used in counselor education programs. Under the umbrella of educational technology, distance supervision involves the use of information and communication technologies (i.e., devices or applications used to manage or transfer electronic information; hereinafter referred to as *technology*)

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to communicate synchronously (communicating with others at the same time, such as video web conferencing) and asynchronously (communicating with others with a time lag, such as discussion boards) from a distance. As a result, distance supervision maintains both benefits and challenges not typical of face-to-face supervision. Distance supervision maintains benefits such as providing participants with additional flexibility of scheduling and increased access to education (McAdams & Wyatt, 2010; Nelson, Nichter, & Henriksen, 2010). Distance supervision also holds a number of challenges relevant to the security of information and the protection of confidentiality (Rousmaniere & Renfo-Michel, 2016).

Although the 2016 CACREP Standards (CACREP, 2015) do not directly address the challenges associated with using technology in supervision, the Standards establish minimum supervision requirements common to all CACREP-accredited programs. These minimum supervision requirements assist in identifying the types of information that need to be shared in supervision between a supervisor and supervisee. Because of the types of information shared in supervision, distance supervision requires additional consideration of the Health Insurance Portability and Accountability Act (HIPAA; 1996), the Family Educational Rights and Privacy Act (FERPA; 1974), and the *ACA Code of Ethics* (American Counseling Association [ACA], 2014).

Before discussing the legal and ethical requirements for using technology to share and store digital information, we will first establish an understanding of the information required to be shared in supervision. The 2016 CACREP Standards (CACREP, 2015) stipulate that supervision participants share three types of information: weekly real-time communications with faculty members, recorded sessions in supervision (or live on-site supervision), and evaluations of counseling performance. The 2016 CACREP Standards do not specifically address differences in how the supervision standards should be applied to distance supervision versus face-to-face supervision. Thus, participants of distance supervision are held to the same standards as face-to-face participants and are required to share the same information but through digital means. First, distance supervision offers three methods for weekly real-time interactions (group supervision or individual supervision): video, audio, and text-based chat. Depending on the devices and software used, supervision participants may have access to a combination of these modalities; however, the range of software currently in use is relatively unknown. Second, when sharing recorded sessions in distance supervision, participants have four general options: watch recordings via web conferencing software (e.g., Adobe Connect's screen share function), transfer recordings via file sharing software/services or student course platforms (e.g., Blackboard), e-mail recordings, or physically mail recordings. Third, when sharing supervision-related paperwork (e.g., formative/summative evaluations, supervision contracts), counselors could share files via file sharing software/services or student course platforms, e-mail, or physical mail. If a digital method is selected to share information, a third party (i.e., software provider) would become involved in the transfer of information, and additional legal and ethical requirements would need to be followed to protect confidentiality.

Selecting a third-party software provider to digitally share information in university supervision invokes other legal and ethical regulations that are relevant to maintain the confidentiality of client and student information. HIPAA (1996) requires that personal health information of clients be protected. The HIPAA Privacy Rule (2003) and the HIPAA Security Rule (2003) require reasonable and appropriate safeguards to protect confidentiality. The Health Information Technology for Economic and Clinical Health Act (2009) addresses security concerns and privacy for electronic personal health information and identifies *business associates* (e.g., third-party software providers). The Health Information Technology Standards (2012) stipulate provisions for using encrypted and protected links when exchanging information, security standards (e.g., Secure Hash Algorithm 1) for the algorithms used for information in transit, and encryption standards (e.g., 128-bit) as identified by the National Institute of Standards and Technology (Leyva & Leyva, 2015). The HIPAA Final Omnibus Rule (2013) requires third-party software providers to offer a business associate's agreement if the providers seek to market their software program as one that can be used within HIPAA compliance. Also, a business associate's agreement requires a third-party provider to offer technical assistance to users, maintain records of use, and notify users in the event of a breach, all while placing liability on the third-party provider (e.g., subject to fines). However, even if a software platform meets federal standards to digitally transfer or store protected information, state standards may stipulate additional restrictions.

The confidentiality of student information is also a concern presented by using technology in supervision. FERPA (1974) requires educational agencies to protect the confidentiality of student information, such as educational records and personally identifiable information. Yet the law does not specifically address requirements for protecting the confidentiality of digital student information. The current requirements pertain to using reasonable methods to protect confidentiality and are the same for both hard copy and digital personally identifiable information (McDonald, 2008). In fact, FERPA mandates are so outdated that the statute practically breaks down when applied to managing electronic information (Young, 2015). However, it is important to consider FERPA mandates in addition to HIPAA mandates because the supervisee's personally identifiable information (e.g., formative and summative evaluations, supervision contracts) would be digitally shared between the supervisor and supervisee in distance supervision.

Finally, the *ACA Code of Ethics* (Standard F.2.c.; ACA, 2014) requires supervisors to be competent in the technology used and to take necessary precautions to protect confidentiality of digital information. On the basis of the aforementioned mandates and guidelines, sharing information with the use of technology requires an additional legal and ethical knowledge base not necessarily associated with face-to-face supervision.

Therefore, to gain a deeper understanding of the challenges associated with using technology in supervision, we examined the prevalence of counselor education programs using technology to facilitate supervision and the types of technology used in supervision. Using a nonexperimental descriptive

design, we collected a national sample of both supervisors and supervisees from CACREP-accredited programs to address the question, “What is the prevalence of distance supervision in CACREP-accredited counselor education programs?” As a secondary purpose, we examined the types of technology available for use, current training practices, and participants’ perceptions of how frequently they use technology within legal and ethical compliance (e.g., HIPAA). This research may assist programs using technology in supervision to develop institutional policies and procedures to train users, select software, and ensure compliance with legal (HIPAA, FERPA) and ethical (*ACA Code of Ethics*) requirements.

Method

Using a nonexperimental descriptive design, we collected a national sample of both supervisors and supervisees from CACREP-accredited programs over the fall 2014 and spring 2015 semesters. A nonexperimental descriptive design can be appropriate for use when attempting to take a snapshot in time of a large sample while seeking to define and delineate characteristics of a phenomenon (Heppner, Wampold, Owen, Thompson, & Wang, 2016). Participants ($N = 673$) consisted of supervisors and supervisees (i.e., faculty members and students) who participated in university supervision at their current universities. Only participants affiliated with a university counseling program accredited by CACREP were included in the study to ensure that a minimum set of supervision requirements was consistent across all participants’ supervision experiences. A 29-item survey was developed for the purpose of gaining participant demographic information and to examine the use of distance supervision in face-to-face, hybrid, and online CACREP-accredited counselor education programs. Within the survey, information was requested on delivery methods, software programs, training on software and compliance, and participant perceptions of frequency of legal and ethical compliance. Participants were surveyed over the fall 2014 and spring 2015 semesters.

Participants and Procedure

Participants must have engaged in university supervision (i.e., supervision between a faculty member and a student) in a CACREP-accredited counselor education program at their current university during or before the semester the survey was administered. The eligible survey population, generated from the CACREP (n.d.) directory, consisted of supervisors and supervisees from 683 programs across 306 universities. The sample consisted of 673 participants (281 supervisors and 392 supervisees) from 145 universities; 417 participants indicated their affiliated institutions. Participants from roughly half the universities eligible for participation were represented in the sample, and, on average, two or three participants completed the survey from each university. Participants primarily consisted of master’s students ($n = 330$, 49.0%), faculty members/adjunct ($n = 190$, 28.2%), doctoral students ($n = 141$, 21.0%), and specialist in education students ($n = 7$, 1.0%); one partici-

pant (0.1%) was both a specialist in education and a master's student, and four participants indicated miscellaneous professional roles (e.g., dissertation committee member). (Percentages do not total 100 because of rounding.)

All the geographic regions of the Association for Counselor Education and Supervision were represented in the sample: 43.8% ($n = 295$) were in the Southern region, 16.3% ($n = 110$) were in the North Central region, 12.8% ($n = 86$) were in the North Atlantic region, 8.2% ($n = 55$) were in the Rocky Mountain region, 6.4% ($n = 43$) were in the Western region, 20 participants (3.0%) preferred not to say, and 64 cases (9.5%) were missing responses. When cross-referenced against the CACREP (n.d.) directory, the rank order for frequency of counselor education program region and participants' region in the sample was almost identical with the exclusion of the Rocky Mountain and Western regions. The sample was 70.0% ($n = 471$) female and 18.6% ($n = 125$) male; 11 (1.6%) participants indicated other or preferred not to say, and 66 (9.8%) cases were missing. The majority of the participants identified as White ($n = 475$, 70.6%), followed by Black/African American ($n = 57$, 8.5%), Asian ($n = 19$, 2.8%), Latino/Hispanic ($n = 11$, 1.6%), and multiracial ($n = 8$, 1.2%); other racial categories ($n = 4$) represented less than 1% of the sample. Twenty-six participants (3.9%) indicated that they preferred not to respond, and 73 (10.7%) responses were missing.

A sampling frame was developed by visiting each CACREP-accredited counselor education program website and recording e-mails of 693 program administrators and 1,973 program instructors across 294 universities (13 universities required approval from an institutional review board, only one additional institutional review board was completed, and 12 universities were removed from the sampling frame). The sampling frame primarily relied on gatekeepers (i.e., program administrators and instructors) to distribute the survey. The survey was also distributed on the Counselor Education and Supervision Network and COUNSGRADS electronic mailing lists and at a national conference. The first author e-mailed program administrators and instructors with requests to distribute the survey during both the fall 2014 and spring 2015 semesters. A total of 920 participants attempted the survey, and 700 participants completed the full survey (76.1% completion rate).

Instrument

To establish content validity, we developed the survey using a research-based survey template, a review panel of domain experts, and a pilot test group. The study underwent three major draft phases, and, throughout all three drafts, we applied Heppner, Wampold, and Kivlighan's (2008) steps for scale construction to the development of the survey. The final draft consisted of 29 items. The digital survey contained 12 items, with an open-ended *other* response option in addition to set response options. For example, supervisors were asked to "Please identify the type(s) of web-conferencing software you have used as a supervisor (select all that apply)," and the item contained 21 response items in addition to the *none* and open-ended *other* response

options. The digital survey also contained three open-ended response items such as “Please type the name of your college/university in the blank.” Before developing the first draft, we conducted a literature review on technology in supervision to create a survey template to allow us to conceptualize categories of information relevant to the phenomenon of using technology in supervision (e.g., delivery methods, types of technology, specific software programs, training, experience, ethical and legal stipulations). We developed the items for the first major draft based on the literature review and research-based survey template. The survey was reviewed by an expert panel, which consisted of 14 individuals across nine universities who were faculty supervisors, doctoral supervisors, and online educators in counselor education. Faculty supervisors in counselor education had a doctor in philosophy in counselor education or a related field, at least 2 years of experience providing supervision, and at least one semester of experience providing distance supervision. Doctoral supervisors in counselor education had at least a master’s degree in counseling or a related field, 1 year of supervision experience, and one semester of experience providing distance supervision. Online educators in counselor education had at least 2 years of experience using educational technology in higher education to deliver course work. The review panel offered a combined 146 points of feedback, and 132 were suggestions for improvement. After making changes (e.g., correcting grammar, clarifying directions and questions, adding/removing response items, adding/removing questions, reordering questions and response items), we prepared the survey for a pilot test group (i.e., second draft).

The pilot group consisted of 19 participants; 10 were supervisors and nine were supervisees who were recruited via convenience sampling from a single counselor education program located in a metropolitan area. All supervisees were master’s students ($n = 9$), and supervisors consisted of four faculty members and six doctoral student supervisors. The survey was distributed to 52 individuals via e-mail, and 24 individuals started the survey (46.2% response rate). Of the 24 individuals who started the survey, 19 completed the survey in full (79.2% completion rate). Participants were predominantly female ($n = 17$), White ($n = 11$), Black/African American ($n = 5$), and between 20 and 50 years old. Pilot participants offered 23 points of feedback, which contained 11 suggestions for improvement. After adjusting survey items based on participant feedback (i.e., third draft), we finalized the survey for distribution. We also administered the Supervisory Working Alliance Inventory (Efstation, Patton, & Kardash, 1990) to participants who met an additional inclusion criterion (i.e., current distance supervision participant at the time the survey was completed); however, those findings are not included.

Data Management

Data cleaning consisted of screening ineligible respondents, individually examining participant responses across items for irregularities, coding open-text responses into categories, identifying missing data, and cross-referencing

items to more concisely report participant responses. Survey Items 5, 6, and 7 contained an open-text response option in addition to a combined 31 response items that identified software programs and communication methods in supervision. Open-text responses were organized by creating a new category for every new software program/communication method listed by participants, placing the open-text responses into response items that already existed in the item, or coding the open-text response as missing if it could not be interpreted. Out of the 920 participants who attempted the survey, we screened out 84 for not being a supervisor or supervisee, 130 for not completing all survey items that addressed the use of technology in supervision, 16 for not being affiliated with a CACREP-accredited program, six for not being affiliated with a university, and 11 for indicating that they had previously taken the survey.

Results

Prevalence of Distance Supervision

We developed a frequency distribution matrix to examine the prevalence of distance supervision across face-to-face, hybrid, and online counseling programs and address the research question, “What is the prevalence of distance supervision in CACREP-accredited counselor education programs?” (see Table 1). Participants were asked in Item 11 of the survey if distance supervision existed in their programs. Response items included *yes*, *no*, *I don’t know*, and *I prefer not to say*. Item 13 asked participants if their entire counseling degree could be completed from a distance at their current universities. Response items included *yes* (online program), *some classes online but not all* (hybrid program), *no* (face-to-face program), and *I don’t know*. The majority of participants reported that their programs offered only face-to-face course work ($n = 446$), and, of those participants, 105 (23.5%) indicated distance supervision existed in their programs. The participants who indicated that their programs offered hybrid course work (e.g., *some classes online but not all*; $n = 154$) included 77 individuals (50.0%) who also indicated that distance

TABLE 1
Frequency Distribution of Program Course Delivery and Distance Supervision Methods

| Does Distance Supervision Exist? | Program Course Delivery Method | | | | | | | |
|----------------------------------|--------------------------------|-------|----------|-------|----------|-------|--------------|-------|
| | Face-to-Face | | Hybrid | | Online | | I Don't Know | |
| | <i>n</i> | % | <i>n</i> | % | <i>n</i> | % | <i>n</i> | % |
| Yes | 105 | 23.5 | 77 | 50.0 | 33 | 80.5 | 7 | 21.9 |
| No | 271 | 60.8 | 56 | 36.4 | 6 | 14.6 | 8 | 25.0 |
| I don't know | 70 | 15.7 | 21 | 13.6 | 2 | 4.9 | 16 | 50.0 |
| I prefer not to say | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 1 | 3.1 |
| Total | 446 | 100.0 | 154 | 100.0 | 41 | 100.0 | 32 | 100.0 |

Note. Participants could select more than one response item. Hybrid = a combination of face-to-face supervision and online supervision.

supervision existed. Forty-one participants reported that their programs had a full online option to complete course work; of these individuals, 33 (80.5%) indicated that distance supervision also existed, six (14.6%) indicated that distance supervision did not exist, and two (4.9%) did not know. In-person supervision requirements or measurement error may explain why six participants indicated involvement in an online program without the existence of distance supervision. Finally, 32 participants reported that they did not know the program course delivery methods offered by their programs of study.

Although only 23.5% ($n = 105$) of participants in face-to-face programs indicated that distance supervision existed in their counselor education programs, there are many more face-to-face programs than hybrid or online programs in the population of CACREP-accredited programs (CACREP, n.d.). The findings may indicate that a substantial population of programs offer distance supervision opportunities. Overall, 222 (33.0%) of the 673 participants reported that distance supervision existed in their programs, 62.0% of the sample ($n = 417$) reported the name of their universities, and 145 universities were represented in the sample. Distance supervision was reported to exist in almost 49.7% ($n = 72$) of those universities.

Software Used in Distance Supervision

We asked participants to specify the technology and delivery methods used for communicating in real time, sharing recorded sessions, and sharing supervision-related paperwork, and they had the option to select more than one response item. Of the participants, 37.6% ($n = 253$) who used technology to communicate in real time identified 26 software platforms. In rank order, the most frequently used software platforms were Skype, Adobe Connect, Blackboard Collaborate, FaceTime, Global Meeting, GoToMeeting, WebCT, WebEx, Wimba, Google Open Meeting, and Illuminate; 16 other software platforms were used by less than 1% of participants. Of the participants, 26.9% ($n = 181$) who used technology to share recorded client sessions in supervision indicated using at least one software program to share recorded client sessions and identified 30 types of software programs for use in supervision. In rank order, the most frequently used programs were Dropbox, Blackboard Collaborate, Google Docs, Wimba, Box, Kaltura, and 24 other software programs used by less than 1% of participants. Finally, 38.3% of participants ($n = 258$) reported 21 software programs that they use to share supervision-related paperwork between the supervisor and supervisee. In rank order, the software programs consisted of Blackboard, Dropbox, Google Docs, LiveText, Canvas, Box, Moodle, and TK20; less than 1% of the participants indicated using 14 other software programs (see Table 2).

Training on Software and Compliance

To understand the training participants received on the software used in supervision, we asked participants to report the software programs for which they received any form of training. The majority of the participants ($n =$

TABLE 2

Frequency Distribution for Software Used in Supervision

| Method | Real-Time Communication | | Recorded Sessions | | Supervision-Related | |
|------------------------------|--------------------------------|------|--------------------------|------|----------------------------|------|
| | <i>n</i> | % | <i>n</i> | % | <i>n</i> | % |
| None | 418 | 62.1 | | | | |
| Skype | 110 | 16.3 | | | | |
| Adobe Connect | 82 | 12.2 | | | | |
| Blackboard Collaborate | 56 | 8.3 | | | | |
| FaceTime | 38 | 5.7 | | | | |
| Global Meeting | 30 | 4.5 | | | | |
| GoToMeeting | 23 | 3.4 | | | | |
| WebCT | 23 | 3.4 | | | | |
| WebEx | 13 | 1.9 | | | | |
| Wimba | 12 | 1.8 | | | | |
| Google Open Meeting | 10 | 1.5 | | | | |
| Illuminate | 10 | 1.5 | | | | |
| Other ^a | 31 | 4.6 | | | | |
| Missing | 5 | 0.7 | | | | |
| Watched face-to-face session | | | 383 | 56.9 | | |
| Hand delivered | | | 286 | 42.5 | | |
| University e-mail | | | 84 | 12.5 | | |
| Dropbox | | | 79 | 11.7 | | |
| Watched video session | | | 52 | 7.7 | | |
| Blackboard Collaborate | | | 32 | 4.8 | | |
| Google Docs | | | 30 | 4.5 | | |
| Private e-mail | | | 24 | 3.6 | | |
| None | | | 17 | 2.5 | | |
| University server | | | 15 | 2.2 | | |
| USB, CD, DVD | | | 12 | 1.8 | | |
| Wimba | | | 11 | 1.6 | | |
| Snail mail | | | 9 | 1.3 | | |
| Box | | | 7 | 1.0 | | |
| Kaltura | | | 7 | 1.0 | | |
| Other ^b | | | 55 | 8.2 | | |
| Missing | | | 15 | 2.2 | | |
| Hand delivered | | | | | 460 | 68.4 |
| University e-mail | | | | | 374 | 55.6 |
| Blackboard | | | | | 149 | 22.1 |
| Private e-mail | | | | | 71 | 10.6 |
| Dropbox | | | | | 70 | 10.4 |
| Snail mail | | | | | 61 | 9.1 |
| Google Docs | | | | | 29 | 4.3 |
| LiveText | | | | | 19 | 2.8 |
| Canvas | | | | | 14 | 2.1 |
| Box | | | | | 8 | 1.2 |
| Moodle | | | | | 8 | 1.2 |
| University server | | | | | 8 | 1.2 |
| TK20 | | | | | 7 | 1.0 |
| None | | | | | 3 | 0.5 |
| USB, CD, DVD | | | | | 2 | 0.3 |

(Continued)

TABLE 2 (Continued)

Frequency Distribution for Software Used in Supervision

| Method | Real-Time Communication | | Recorded Sessions | | Supervision-Related | |
|--------------------|-------------------------|---|-------------------|---|---------------------|-----|
| | <i>n</i> | % | <i>n</i> | % | <i>n</i> | % |
| Other ^c | | | | | 29 | 4.3 |
| Missing | | | | | 4 | 0.6 |

Note. Participants could select multiple response items. For real-time communication methods, three participants selected none while also indicating they used specific types of software to communicate in real time.

^aThe other software programs, which were used by less than 1% of participants, included VSee, Zoom, ClickMeeting, Fuze Meeting Pro, InterCall, Canvas, Tandberg Video Conferencing, Jabber, iMeet, Infinite Conferencing, ooVoo, AnyMeeting, Desire2Learn, Moodle, and MSN Video Chat. ^bThe other software programs, which were used by less than 1% of participants, included Hightail, Panopto, WebCT, Adobe Connect, Illuminate, ZendTo, Acclaim, Ensemble, Milestone, ZipCloud, Canvas, GoToMeeting, Landro, Lifesize, LiveText, Titanium, JustCloud, SugarSync, Arcadia, Apple TV, Chalk & Wire, ClinicaM, Desire2Learn, and Learning Space. ^cThe other software programs, which were used by less than 1% of participants, included WebCT, Desire2Learn, Chalk & Wire, Fax, Citrix ShareFile, Learning Space, Qualtrics, Sakai, BackupGenie, JustCloud, Morpheus, Adobe Connect, Titanium, and Typhon.

356) reported the use of specific software programs to communicate in real time, transfer recorded sessions, or transfer supervision-related paperwork. However, only 9.0% (*n* = 32) of these participants received training on all software programs that they specified for use, 14.0% (*n* = 50) received training on some of the programs specified, and 77.0% (*n* = 274) received no training. Thus, the majority of participants using software in supervision did not receive any form of training.

We also asked participants what types of training they received on the technology used in supervision related to HIPAA, FERPA, and the *ACA Code of Ethics*. The response items (*training provided by the university, training provided by another entity other than a university, self-training, none, prefer not to respond, and I did not use technology in supervision*) also allowed participants to select more than one type of training. Participants reported that they received a variety of training on HIPAA. Of the participants, 42.2% (*n* = 284) received training from their universities (e.g., supervisor, class), 21.8% (*n* = 147) received training outside of their universities (e.g., workshop, conference, seminar), and 30.5% (*n* = 205) received self-training. An additional 14.3% of participants (*n* = 96) received no training on HIPAA, 0.9% of participants (*n* = 6) preferred not to say, and 14.9% of participants (*n* = 100) reported not using technology in supervision. With regard to training on FERPA, 41.6% of participants (*n* = 280) received training from their universities, 14.0% (*n* = 94) received training outside of their universities, 24.7% (*n* = 166) received self-training, 21.3% (*n* = 143) received no training, 1.2% (*n* = 8) preferred not to say, and 14.7% (*n* = 99) did not use technology in supervision. Finally, when examining the training received on the *ACA Code of Ethics*, we found that 53.9% of participants (*n* = 363) received training from their universities, 21.3% of participants

($n = 143$) received training outside of their universities, and 37.6% ($n = 253$) received self-training. An additional 7.3% ($n = 49$) received no training on the *ACA Code of Ethics*, 0.5% ($n = 3$) preferred not to say, and 14.4% ($n = 97$) did not use technology in supervision. The majority of participants who used technology in supervision received at least some form of training (university-provided, non-university-provided, or self-training) for HIPAA, FERPA, and *ACA Code of Ethics* compliance (see Table 3).

Frequency of HIPAA, FERPA, ACA Code of Ethics Compliance

We asked participants to indicate how frequently they used technology in supervision within HIPAA, FERPA, and *ACA Code of Ethics* compliance. Response items included *never, rarely, some of the time, most of the time, always, I don't know, prefer not say, and did not use*. After adjusting percentages to omit participants who indicated that they did not use technology in supervision from the sample (HIPAA, $n = 547$; FERPA, $n = 554$; *ACA Code of Ethics*, $n = 553$), we found that 34.3%–34.9% of participants perceived that they always used technology in supervision within HIPAA ($n = 231$) and FERPA ($n = 235$) compliance. Slightly more participants, 41.3% ($n = 278$), perceived that they always used technology in supervision within *ACA Code of Ethics* compliance. Less than half of the sample that used technology in supervision perceived that they always used it within HIPAA, FERPA, and *ACA Code of Ethics* compliance (see Table 4).

TABLE 3
Frequency Distribution of HIPAA, FERPA,
and ACA Code of Ethics Training

| Standard and Type of Training | <i>n</i> | % |
|--------------------------------------|-----------------|----------|
| HIPAA | | |
| University | 284 | 42.2 |
| Another entity | 147 | 21.8 |
| Self | 205 | 30.5 |
| None | 96 | 14.3 |
| Prefer not say | 6 | 0.9 |
| Technology not used | 100 | 14.9 |
| FERPA | | |
| University | 280 | 41.6 |
| Another entity | 94 | 14.0 |
| Self | 166 | 24.7 |
| None | 143 | 21.3 |
| Prefer not say | 8 | 1.2 |
| Technology not used | 99 | 14.7 |
| ACA Code of Ethics | | |
| University | 363 | 53.9 |
| Another entity | 143 | 21.3 |
| Self | 253 | 37.6 |
| None | 49 | 7.3 |
| Prefer not say | 3 | 0.5 |
| Technology not used | 97 | 14.4 |

Note. Participants could select multiple response items. HIPAA = Health Insurance Portability and Accountability Act of 1996; FERPA = Family Educational Rights and Privacy Act of 1974; ACA = American Counseling Association.

Discussion

The use of technology to deliver supervision is still relatively young in the field of counselor education, yet it is clearly used throughout face-to-face, hybrid, and online programs. When using technology in supervision, supervisors and supervisees must observe additional legal and ethical regulation. Counselor education programs may benefit from developing program policy to guide the use of technology in supervision while also providing users with training specific to the software used in supervision.

Prevalence

One third of the participants reported that distance supervision was offered in their programs. Of the universities represented in the sample, 72 (50.0%) offered synchronous distance supervision. The most recent study that examined the prevalence of distance supervision in counselor education (Wantz et al., 2003) surveyed 127 programs (CACREP- and non-CACREP-accredited) and found that for 50 institutions, 38.5% ($n = 35$) of the 91 supervisors surveyed

TABLE 4
Frequency Distribution of How Often Participants Used Technology Within HIPAA, FERPA, and ACA Code of Ethics Compliance

| Standard | <i>n</i> | % |
|--------------------|-----------------|----------|
| HIPAA | | |
| Never | 46 | 6.8 |
| Rarely | 44 | 6.5 |
| Some of the time | 48 | 7.1 |
| Most of the time | 115 | 17.1 |
| Always | 231 | 34.3 |
| I don't know | 58 | 8.6 |
| Prefer not to say | 5 | 0.7 |
| Did not use | 126 | 18.7 |
| FERPA | | |
| Never | 62 | 9.2 |
| Rarely | 43 | 6.4 |
| Some of the time | 39 | 5.8 |
| Most of the time | 88 | 13.1 |
| Always | 235 | 34.9 |
| I don't know | 83 | 12.3 |
| Prefer not to say | 5 | 0.7 |
| Did not use | 128 | 19.0 |
| ACA Code of Ethics | | |
| Never | 33 | 4.9 |
| Rarely | 30 | 4.5 |
| Some of the time | 49 | 7.3 |
| Most of the time | 106 | 15.8 |
| Always | 278 | 41.3 |
| I don't know | 53 | 7.9 |
| Prefer not to say | 3 | 0.5 |
| Did not use | 121 | 18.0 |

Note. Participants could select multiple response items. HIPAA = Health Insurance Portability and Accountability Act of 1996; FERPA = Family Educational Rights and Privacy Act of 1974; ACA = American Counseling Association.

indicated that distance supervision existed in their programs. Furthermore, according to the CACREP (n.d.) directory of accredited programs, only 24 programs across 12 universities were considered to be online programs in 2016. However, our findings indicate that at least 72 CACREP-accredited programs offer distance supervision opportunities. Therefore, it is clear that distance supervision exists not only in online programs but also in a large number of traditional programs.

Software Programs and Compliance

Because half of the CACREP-accredited programs likely offer distance supervision, the software used to facilitate supervision is an important consideration. The current study provides a detailed list of 26 software platforms used to communicate in real time, 30 software programs used to share recorded client sessions, and 21 software programs used to share supervision-related paperwork and indicates the most frequently used programs. Yet many of the most frequently reported software programs used in supervision (e.g., Skype, FaceTime) cannot be used within HIPAA compliance because they do not offer a business associate's agreement or do not adhere to other HIPAA requirements. Therefore, many of the software programs, as they were configured at the time of study and were reported for use, should not be used to share HIPAA-protected electronic personal health information. However, such software programs can still be used in supervision as long as precautions are taken to ensure that electronic personal health information is either masked or not shared.

The FERPA requirements for sharing personally identifiable information are outdated and do not adequately address the use of technology to share and store information (Young, 2015). On the basis of the current regulations, users should take reasonable methods to protect data (McDonald, 2008), including using software programs (e.g., Blackboard) with security standards commonly accepted in the field, encrypting digital information, and password protecting digital information. Furthermore, the 2016 CACREP Standards (CACREP, 2015) also require that privacy and confidentiality be maintained in supervision. Standard I.I. (CACREP, 2015) specifically states,

The institution provides adequate and appropriate access to counseling instruction environments (on or off campus) that are conducive to training and supervision of individual and group counseling. The counseling instruction environments include technologies and other observational capabilities as well as procedures for maintaining privacy and confidentiality. (p. 4)

Because distance supervision takes place off campus, the institution is responsible for providing an instructional environment (i.e., software platforms) conducive to conducting supervision in a confidential environment.

Training

Training on both software functions and the use of technology in supervision within legal and ethical compliance are important. Of the participants ($n =$

356) who used software in supervision, only 9.0% ($n = 32$) received training on all software specified, 14.0% ($n = 50$) received training on some, and 77.0% ($n = 274$) received no training. The majority of participants who received training for using technology in supervision within legal and ethical compliance indicated that they either participated in university-provided training, training from an external source, or self-training. Only a small portion of the sample reported receiving training on the software used in supervision even though the majority of participants reported receiving training on using technology within HIPAA, FERPA, and *ACA Code of Ethics* compliance. Furthermore, only 34.3%–34.9% of participants perceived that they always used technology in supervision within HIPAA ($n = 231$) and FERPA ($n = 235$) compliance, and 41.3% ($n = 278$) of participants perceived that they always used technology in supervision within *ACA Code of Ethics* compliance. Thus, the majority of the sample reported receiving training on legal and ethical compliance, yet almost 50%–60% of participants reported that they did not always use technology in supervision within compliance. A causal relationship cannot be drawn between training on legal and ethical compliance, training on software, and reported frequency of using technology within legal and ethical compliance. However, institutions may still benefit from collaborating with their technical services department to arrange software training opportunities for students and staff.

Limitations

There were limitations relevant to internal and external validity. Although steps were taken to establish the content validity of the survey, the findings still relied on self-report data. Response bias may have also been a limitation. For example, the results for the survey items presented in Tables 3 and 4 contain minor variations in the number of participants who reported not using technology in supervision. This could exist because of the sensitive nature of the content of the questions. For example, participants may have felt more comfortable reporting how frequently they used technology within *ACA Code of Ethics* compliance, but less comfortable reporting how often they used technology within HIPAA compliance. Recall bias may have been a threat to internal validity because participants were requested to recall information related to their collective past experiences across items.

The findings may not be generalizable to non-CACREP-accredited programs because non-CACREP-accredited programs were not included in the sampling frame. Coverage error may have also been a threat to external validity because the survey largely relied on gatekeepers (program administrators) to distribute the survey to participants. Furthermore, a response rate could not be calculated because of the reliance on gatekeepers to distribute the survey, and nonresponse bias may have contributed to error. For example, some participants may not have been interested in the survey because they did not use technology in supervision, whereas other participants may have decided to take the survey because they used technology in supervision.

Implications for Counselor Education and Future Research

Supervisors have a responsibility to take necessary precautions to protect the confidentiality of digital information (Standard F.2.c.; ACA, 2014). In addition, institutions are required to provide an instructional environment that includes procedures for maintaining confidentiality (CACREP, 2015). To observe the aforementioned responsibilities, program policy and procedures could be developed to require that the technology used in distance supervision meet the minimum legal and ethical standards for protecting electronic personal health information and personally identifiable information if shared in supervision. Alternatively, if the technology selected for use in supervision does not meet the legal and ethical requirements for protecting confidential information, policies and procedures must be developed to avoid sharing electronic personal health information and personally identifiable information through digital means. Each platform has different capabilities and operational functions for protecting information (e.g., log-in features, password protection for recordings, encryption levels), which can be observed by visiting the websites of the software programs reported for use in the study. Therefore, in alignment with the 2016 CACREP Standards (CACREP, 2015), institutions should include procedures to protect privacy and confidentiality (e.g., how information is stored, how information is shared, what can and cannot be recorded) that are uniquely tailored to the security capabilities and operational functions of the software selected for use. Furthermore, institutions could benefit from consulting with their legal teams to gain an understanding of any state mandates that might stipulate additional restrictions. In addition to developing policy for the selection and use of technology in supervision, counselor education programs may develop policy to assist users in gaining competence with the technology used in supervision.

The *ACA Code of Ethics* (ACA, 2014) requires that “when using technology in supervision, counselor supervisors are competent in the use of those technologies” (Standard F.2.c.). Having competence in the use of technology requires knowledge of the software’s operational functions as well as the ability to understand the software’s limitations for legal and ethical compliance. Having knowledge of the legal and ethical requirements for using technology in supervision allows participants to determine which software programs can be used within legal and ethical compliance. Therefore, learning the software’s operational functions is necessary not only for the supervisor but also for the supervisee so that the software may be used within legal and ethical compliance (e.g., supervisees would need to know how to operationally upload and share recorded sessions with their supervisor while also protecting the privacy of the information being shared).

A number of areas in need of future research have emerged from the findings of this study. Using a quantitative approach, researchers could develop an instrument to measure the knowledge of legal and ethical compliance. After developing such an instrument, researchers could examine the relationships

among the types of training received and knowledge of legal and ethical compliance. The majority of the sample indicated receiving training on how to use technology in supervision related to legal and ethical compliance, yet less than half of the sample reported *always* using technology within legal and ethical compliance. From a qualitative perspective, a grounded theory could be useful to gain an understanding of the obstacles facing participants for using distance supervision within compliance. A quantitative content analysis could be conducted on all software programs specified for use in supervision to develop a reference list of software programs capable of HIPAA, FERPA, and *ACA Code of Ethics* compliance. Such a list could mitigate the mystery surrounding the selection of legally compliant software programs for distance supervision and provide institutions an empirical reference point for selecting software for use in distance supervision. Technology can be a powerful tool to enhance the supervision experience when users understand the technology and how to protect the confidentiality of information.

References

- American Counseling Association. (2014). *ACA code of ethics*. Alexandria, VA: Author.
- Coker, K., & Schooley, A. (2009, October). *Investigating the effectiveness of clinical supervision in a CACREP-accredited online counseling program*. Paper presented at the meeting of the Association for Counselor Education and Supervision, San Diego, CA.
- Council for Accreditation of Counseling and Related Educational Programs. (n.d.). *Directory*. Retrieved from <http://www.cacrep.org/directory/>
- Council for Accreditation of Counseling and Related Educational Programs. (2015). *CACREP 2016 Standards*. Alexandria, VA: Author.
- EdTechReview. (2013). *What is EdTech?* Retrieved from <http://edtechreview.in/dictionary/119-what-is-edtech>
- Efstation, J. F., Patton, M. J., & Kardash, C. M. (1990). Measuring the working alliance in counselor supervision. *Journal of Counseling Psychology, 37*, 322–329. doi:10.1037/0022-0167.37.3.322
- Family Educational Rights and Privacy Act, 34 C.F.R. § 99 (1974). Retrieved from <https://www.law.cornell.edu/cfr/text/34/part-99>
- Health Information Technology for Economic and Clinical Health Act, Pub. L. No. 111-5 (2009). Retrieved from <http://www.hhs.gov/ocr/privacy/hipaa/administrative/enforcementrule/hitechenforcementifr.html>
- Health Information Technology Standards, 45 C.F.R. § 170.210 (2012).
- Health Insurance Portability and Accountability Act, Pub. L. No. 104-191, 110 Stat. 1936 (1996).
- Heppner, P. P., Wampold, B. E., & Kivlighan, D. M. (2008). *Research design in counseling* (3rd ed.). Belmont, CA: Thomson Brooks/Cole.
- Heppner, P. P., Wampold, B. E., Owen, J., Thompson, M. N., & Wang, K. T. (2016). *Research design in counseling* (4th ed.). Boston, MA: Cengage Learning.
- HIPAA Final Omnibus Rule, 45 C.F.R. §§ 160–164 (2013). Retrieved from <http://www.hipaa-survivalguide.com/hipaa-regulations/hipaa-regulations.php>
- HIPAA Privacy Rule, 45 C.F.R. §§ 160–164 (2003). Retrieved from <http://www.hhs.gov/ocr/privacy/hipaa/administrative/privacyrule/>
- HIPAA Security Rule, 45 C.F.R. §§ 160–164 (2003). Retrieved from <http://www.hhs.gov/ocr/privacy/hipaa/administrative/securityrule/index.html>
- Hsu, Y., Hung, J., & Ching, Y. (2013). Trends of educational technology research: More than a decade of international research in six SSCI-indexed refereed journals. *Educational Technology Research and Development, 61*, 685–705.
- Leyva, C., & Leyva, D. (2015). *HIPAA survival guide* (4th ed.). Retrieved from <http://www.hipaa-survivalguide.com/hit-subchapter-d/hit-170-210.php>
- McAdams, C. R., & Wyatt, K. L. (2010). The regulation of technology-assisted distance counseling and supervision in the United States: An analysis of current extent, trends, and implications. *Counselor Education and Supervision, 49*, 179–192. doi:10.1002/j.1556-6978.2010.tb00097.x
- McDonald, S. J. (2008). A few things about E-FERPA [Web log post]. Retrieved from <http://www.educause.edu/blogs/sjmc/donal/few-things-about-e-ferpa>

- Nelson, J. A., Nichter, M., & Henriksen, R. (2010). On-line supervision and face-to-face supervision in the counseling internship: An exploratory study of similarities and differences. In *Ideas and research you can use: VISTAS 2010*. Retrieved from http://www.counseling.org/docs/default-source/vistas/vistas_2010_article_46.pdf?sfvrsn=7
- Rousmaniere, T., & Renfo-Michel, R. (2016). *Using technology to enhance supervision*. Alexandria, VA: American Counseling Association.
- Wantz, R. A., Tromski, D. M., Mortsolf, G. Y., Yoxtheimer, C. J., Brill, G., & Cole, A. (2003). Incorporating distance learning into counselor education programs: A research study. In J. W. Bloom & G. R. Waltz (Eds.), *Cybercounseling and cyberlearning: An encore* (pp. 327–344). Greensboro, NC: Carolina Academic Press.
- Young, E. (2015). Educational privacy in the online classroom: FERPA, MOOCS, and the big data conundrum. *Harvard Journal of Law & Technology*, 28, 549–592.